Eastern Iowa Community College District
306 West River Drive
Davenport, IA 52801-1221

Title: "A Collaboration of Museums, Libraries, and Schools: Creating Community Based Learning Spaces"

A B S T R A C T

Connected By A River: A Collaboration of Museums, Libraries, and Schools to Create Community Based Learning Spaces

Rapid technological, economic, and social changes are challenging nearly every established social institution to modify traditional methods of operation. Institutions that will thrive in the 21st century will not strive simply to survive these changes, but rather, will look upon these transformations as an opportunity to reposition their institutions in order to broaden their public support and strengthen their economic base. This project will demonstrate how local museums and libraries, working in collaboration with local schools, can increase their value to the community and assume a more vital role in the education of students.

Connected By A River is designed to demonstrate an innovative, national model for the formation of a broad-based community collaboration. The project is built around four compelling themes that drove the design of the project. Those themes are: Connectivity, Core Learning Through Museums and Libraries, High Interest Content, and Exploring the Capabilities of Advanced Information Technologies.

The Project Implementation is structured around three objectives and ten major activities.

 Objective 1: Develop Innovative learning Modules Based Upon Local Standards and Benchmarks -- Five learning modules will be developed based upon exhibits at the museum and focused upon a common theme of the environment of the Mississippi River. These learning modules will be formatted for web-based or CD-ROM delivery and will incorporate video conferencing, simulations, and video streaming.

 Objective 2: Evaluate Project Outcomes and Research Results -- Ten classrooms will be selected as testbed sites for this project. Each of the five modules will be piloted by a minimum of two testbed sites. The classroom instructors at these sites are part of the project team and will provide detailed feedback to the module design team on their perceptions of the strengths and weaknesses of the learning module. The learning modules will be revised based upon the feedback from the testbed sites.

 Objective 3: Disseminate and Build Upon Project Activities and Outcomes to Promote and Sustain the Project -- This project will not only demonstrate how museums, libraries, and schools in eastern Iowa can collaborate to enrich the educational experience of local students, but will also serve as a model for community collaborations throughout Iowa and the country. It is a goal of this project to actively encourage the development of similar community-based partnerships. Project documentation will be collected and maintained in order to encourage and assist other communities to adopt this collaborative model.

By month 24, this project will have demonstrated how emerging information technologies can be used to create new, quality learning spaces that draw upon the existing local resources of museums and libraries. The successful implementation and dissemination of this model will encourage other museums and libraries to redefine their relationship to K-12 education and to explore assuming a more central role in the educational life of the community. This project will provide the vision and the tools for other communities to pursue similar collaborative ventures.

CONNECTED BY A RIVER:
A COLLABORATION OF MUSEUMS, LIBRARIES, AND SCHOOLS TO CREATE COMMUNITY BASED LEARNING SPACES

Project Mission

To demonstrate an innovative collaborative effort between museums, libraries, and schools that utilizes emerging information technologies and the unique resources of local museums and libraries to create learning spaces that are an integral part of the core learning of students.

Rapid technological, economic, and social changes are challenging nearly every established social institution to modify traditional methods of operation. Institutions that will thrive in the 21st century will not strive simply to survive these changes, but rather, will look upon these transformations as an opportunity to reposition their institutions in order to broaden their public support and strengthen their economic base. This project will demonstrate how local museums and libraries, working in collaboration with local schools, can increase their value to the community and assume a more vital role in the education of students.

The Changing Role of Libraries - Athena was the mythical Greek Goddess of wisdom. Her name formed the root word for the earliest libraries -- Athenariums. For centuries the information available within the walls of these Athenariums represented the wisdom of the world as it existed in books and letters. The information age is bringing dramatic changes to libraries. Libraries are no longer constrained by their four walls, they connect with other libraries and information sources to put vast amounts of information at one's fingertips. A fundamental shift is occurring in how information is accessed. The vessel that is the repository for information is shifting from the shelves of the library to the servers of our web-based information systems. Through these incredible devices, the walls that used to encompass the holdings of the library have become nearly transparent as libraries incorporate vast amounts of information stored in locations throughout the world. Yet this new, nearly unfettered access to information is both a blessing and a curse. With access to a library consisting of "information networks of networks" many users get lost in a maze of data. The unprecedented challenge for libraries is to organize this vast ocean of data in ways that have value and meaning to the learner. Never has there been a greater need for librarians to bring order to information than exists today. In this project an on-line library will serve as the portal to information and as the organizer of that information.

The Changing Role of Schools - Schools are being bombarded by a variety of often competing forces that are causing fundamental reassessments in how they carry out their mission. These forces are many and varied. They include: the specter of privatization of previously public run schools; the impacts of distance education; the growing home schooling movement; shortages of quality teachers; increasing expectations for schools to deal with a student's social acculturation as well as educational advancement; and, constraints of funding. All of these factors and many more have created an atmosphere that challenges schools to explore new ideas and new educational partnerships. This project seeks to capitalize upon the challenges and opportunities of the moment to pilot a project that brings museums and libraries into a more intimate and coordinated partnership with K-12 schools.

The Changing Role of Museums - A number of authors have written about the history of museums. Richard Rabinowitz concluded that in their early history, museums emphasized seeing an object rather than reflecting on the object. At this early stage museums were, according to Rabinowitz, "collections of oddities and eccentricities" (Rabinowitz, 1973).[1] In 1973, twelve noted authors offered their ideas on the future role of museums. They foresaw the

museum evolving beyond its traditional role as preserver of objects to also become an important educational venue (Museums, Imagination, and Education, 1973).[2] In 1986, Ellen Cohran Hicks in her paper, <u>Museums and Schools as Partners</u>, describes a "learning network" of museums and schools designed to achieve common educational goals (Hicks, 1986).[3]

In recent years, museums have focused a great deal of energy on being a partner in a learning society. A 1998 survey documented the range of educational activities that museums offer to the nation's schools. That publication entitled, <u>True Needs True Partners: Museums Serving Schools</u>, presented a strong picture of the educational programming museums provided. It found museums were providing more K-12 programs than ever before. Among the specific findings: museums spent $193 million annually on K-12 programs; 70 percent of museums had at least one, full-time, paid staff who offers educational programming; museums provided nearly 4 million hours of educational programming; museums were making substantial use of curriculum standards in shaping educational programs; and 70 percent of the museums reported an increase in the number of students, teachers, and schools served (True Needs, True Partners, 1998).[4] Museums within the eastern Iowa community have followed a similar trend of providing increasing levels of educational services. Yet there are alarming indicators that the partnership which has blossomed between museums and schools in the last decade could be severely restricted if the partnership does not evolve and change. Local school districts are increasingly restricting field trips and off school grounds travel. Superintendents and building principals are facing increasing pressures to deny classroom teachers' requests for such trips. The reasons, perhaps well founded, revolve around concerns of safety, budget, scheduling, and manpower shortages. The problem is rooted in the fact that access to museum displays and artifacts has limitations imposed by time and location. That is, patrons seeking to experience these displays must be physically present in the museum building during hours of operation. These limitations can, in significant measure, be overcome through the creative and informed use of emerging information technologies. This project envisions a collaborative pilot effort by the Putnam Museum, the Nahant Marsh Educational Center, ten classrooms in four school districts, school libraries, and the Advanced Technology Environmental Education Library (ATEEL) to not simply maintain the role of the local museums in education but to accelerate the role of museums to a new level of prominence and importance in the education of students in eastern Iowa.

In their book, "Blur: The Speed of Change in a Connected Economy," Davis and Myer observe that a key to success in the new information economy is to: "connect everything with everything. Make sure that the islands in your institutions connect with each other… More challenging, you must also connect to islands that lie beyond the boundaries of your institution" (Davis and Meyer, 1998).[5] This project is built upon the theme of **excellence through connectivity**. All three institutions, museums, libraries, and schools share the mission of education; all three institutions have unique resources to fulfill this mission; and, all three institutions face a moment in history where they are redefining their activities and their value to the local community.

Adaptability

This project will not only demonstrate how museums, libraries, and schools in eastern Iowa can collaborate to enrich the educational experience of local students, but will also serve as a model for community collaborations throughout Iowa and the country. It is a goal of this project to actively encourage the development of similar community-based partnerships. Project documentation will be collected and maintained in order to encourage and assist other communities to adopt this collaborative model. That documentation will include: site features and design, adopting standards and benchmarks to museum-based learning exercises, staffing and organization requirements, role and responsibility of each partner, hardware/ software configuration, model curriculum packages, methods to develop and jury content, impact measures on students, and methods to market learning experiences to instructors and school districts.

By month 24, this project will have demonstrated how emerging information technologies can be used to create new, quality learning spaces that draw upon the existing local resources of museums and libraries. The successful implementation and dissemination of this model will encourage other museums and libraries to redefine their relationship to K-12 education and to explore assuming a more central role in the educational life of the community. This project will provide the vision and the tools for other communities to pursue similar collaborative ventures.

Design

This project is designed to demonstrate an innovative, national model for the formation of a broad-based community collaboration. The project is built around four compelling themes that drove the design of the project. Those themes are:

Connectivity -- A hallmark of this project is connectivity. The project: connects local museums and libraries to other community organizations in new ways; connects students, via advanced information technology, to new forms of learning; connects the learning modules around a common theme of the Mississippi River.

Core Learning Through Museums and Libraries -- The project positions local museums and libraries as a full and credible partner in the educational process. The primary content for the learning modules will come from the museum displays and resources. The libraries will be the portal to the learning experience, will help create and organize the learning experience, and will provide a variety of resources to enhance the learning experience. The museum-based learning activities will be developed around the established core curriculum Standards and Benchmarks of the local school districts.

High Interest Content -- The project focuses upon the theme of the environment of the Mississippi River. This theme was chosen for reasons including the following: high student interest; local impact and importance; provides rich opportunities for "field" experiences; is a real and tangible part of the day-to-day experience of students; and is a major topic of focus at the local museum and libraries.

Exploring the Capabilities of Advanced Information Technologies -- This project will utilize a variety of new, readily available, advanced information technologies. Through the mediums of CD-ROMs and the Internet, students will access museum and library resources including: newly created museum-based learning modules and simulations; asynchronous chat rooms connecting students to staff at the museum, and real-time, two-way classroom conferencing with experts.

Project implementation is structured around three objectives and ten major activities. The *Schedule of Completion/Project Implementation and Evaluation Table*, establishes the project timeline, identifies the person responsible for each major activity, and sets forth both formative/process evaluation measures and summative/impact evaluation measures for each major activity.

The project partners, whose role is more fully defined in the attached Collaboration Chart, include: Putnam Museum/Nahant Marsh Educational Center, Advanced Technology Environmental Education Library (ATEEL) of Scott Community College, participating K-12 libraries, Davenport Public Library, ten K-12 schools, the Area Education Agency, River Action, Inc., and the National Science Foundation funded Advanced Technology Environmental Education Center (ATEEC).

OBJECTIVE 1: Develop Innovative learning Modules Based Upon Local Standards and Benchmarks

Activities: Project Advisory Team is assembled composed of museum professional, librarian, educator, instructional designer, information technology expert, and environmental content specialist. This team brings the institutional commitment and expertise required to ensure project success.

Five learning modules will be developed for use in the local K-12 schools. The common theme of these modules will be the environment of the Mississippi River. The following topics will be developed into learning modules:

- Life forms and habitat on the River;
- The role of wetlands in cleansing the River;
- Pollution sources and their effects on the River;
- The impact of man-made structures on the River, i.e., locks and dams, construction on flood plains; and
- A case study, the creation, destruction, and eventual restoration of the Nahant Marsh.

An educational team led by an instructional designer will review, in depth, the Standards and Benchmarks of the schools and the resources available at the museum to determine the specific learning activities to be focused upon within each topic area.

Five packaged "turnkey" learning modules will be developed and formatted for web-based or CD-ROM delivery. These modules will be flexible in design to enable ready integration into existing courses. These learning modules will include pre- and post-sample tests, teacher resources, student resources containing learning content, listing of enhancement resources available through the library, and inquiry-based projects to be completed either on-line, at the museum, or in the community. Additionally, these learning modules will be designed to present a visually rich, fast paced, high tempo educational experience. The learning experience will incorporate video conferencing, simulations, and video streaming.

     Video Conferencing -- A video "pipeline" will be established between the participating classrooms, the museum, and the Nahant Marsh. This "pipeline," supported by computer video cameras at each location, will allow students and instructors to schedule times to "visit" these sites and "Ask the Experts" questions related to the learning modules.

     Simulations -- A variety of simulations will be developed to support the instructional curriculum. These simulations may include: a depiction of how chemicals dumped in the street reach the river and form a toxic plume, a comparison of water levels during flooding on a river bound by flood walls versus one surrounded by wetlands, a mapping of plant and animal density and type in various river habitats, i.e., the river bottom, wetlands, tributaries or backwaters.

     Video Streaming -- This component will allow students to enter worlds outside their classroom for "field-based" learning experiences. These experiences will include: video field trips to the museum and Nahant Marsh; listening to museum staff and other on-site professionals explaining various features of the river; demonstrations of activities to be engaged in when visiting the museum with their class or family; and, interviews with professional environmentalists (i.e., fish and wildlife officers, naturalists, pollution control specialists) to learn of career opportunities in fields related to the learning modules.

A common template will be developed for use by this project. For ease of use all project learning modules will have a common look, feel, and flow.

Following development and field testing of the modules an in-service will be held for librarians and teachers throughout the local school districts. Teachers of the appropriate grades and subject areas will be targeted to learn how to access and use the learning modules.

OBJECTIVE 2: Evaluate Project Outcomes and Research Results

Activities: Ten classrooms will be selected as testbed sites for this project. Each of the five modules will be piloted by a minimum of two testbed sites. The classroom instructors at these sites are part of the project team and will provide detailed feedback to the module design team on their perceptions of the strengths and weaknesses of the learning module. The learning modules will be revised based upon the feedback from the testbed sites.

An on-line teacher and student evaluation/feedback system will be incorporated into the design of the learning site. This will provide for an on-going evaluation and assessment of the utilization and effectiveness of the learning modules. The project incorporates an applied research design that will provide evidence of the success of the model. The research component seeks to answer three questions.

1. Did the *Connected by a River* project enhance student access to and use of museum resources?

2. Does the project demonstrate that participation in these museum-based learning modules resulted in student learning as measured against the school district's adopted Benchmarks and Standards?

3. Do participating classroom teachers support the expansion and further development of the role of museums and libraries in the core educational process?

Data related to these questions will be collected, analyzed, and reported.

OBJECTIVE 3: Disseminate and Build Upon Project Activities and Outcomes to Promote and Sustain the Project

Activities: A critical activity is to fully document the project design, implementation, and evaluation. This documentation can be used by other communities seeking to adopt a similar model. Perhaps, more importantly, a well-documented successful project will serve as a marketing tool for museums around the country who seek to assume a more vital role in the education of students in their communities.

Project dissemination will be the responsibility of all partners. The wide cross section of community partners ensures dissemination to a variety of audiences including the education community, librarians, environmental organizations, and museum professionals. Each partner organization will actively disseminate project results through their professional conferences, publications, and professional associations. A project website will be developed and maintained as a permanent section for the on-line Advanced Technology Environmental Education Library (ATEEL) through the Scott Community College library.

Why connect ATEEL, a national digital library with local museums?

This project represents a critical building block in the creation of a major on-line library and learning center. The Advanced Technology Environmental Education Library (ATEEL) of which this project is an innovative and key component, is developing the resources and capacity to become a significant national and international player in the digital library revolution. Through a major National Science Foundation grant, ATEEL has formed a partnership with MIT to become a conduit for the rapid dissemination of knowledge and discovery emerging from research labs throughout the world. Through the earlier support of IMLS, ATEEL has established itself as the leading source of on-line environmental education technology information in the United States. However, a major challenge lies ahead. Massive on-line digital libraries, particularly those devoted to education, must be able to connect with a student's local real world environment. Connecting ATEEL to local museum and library resources begins to connect or marry the virtual world of computer transmitted information to the real world where one can touch, smell, and feel that which they are learning. Connecting learning experiences at local museums with national on-line libraries is a key to creating a quality learning space.

Networking local museums in significant and meaningful ways with national digital libraries, as is outlined in this project, is a win for the museum, a win for the on-line library, and a win for students. It celebrates and elevates the learning resources available in the local museum; it expands the entry points or portals for the digital library; and, it provide a fuller, richer range of learning resources for students.

Management Plan

The Project Director will have overall responsibility for operation of the *Connected By A River* project. However, the Project Director will carry out her responsibilities with the support and participation of the project partners and the project professional staff. The overall management of the project will occur through the following organizational structures:

> *Project Management Team* -- The membership of this team will be the core professional staff. It will include the Project Director, Instructional Designer, Librarian, and Museum Educator.
>
> This team will be chaired by the Project Director and will meet monthly. Under the leadership of the Project Director this team will have primary responsibility to ensure all objectives and activities of the project are carried out in a timely manner and that the performance measures are achieved. Individual team members are responsible to coordinate their activities with the team and assist the Project Director in overall management of the project.
>
> *Project Advisory Board* -- The Project Advisory Board will be chaired by the Project Director. Formal meetings of the Board will be scheduled semi-annually. The Board will review written evaluation/progress reports and discuss with project staff the status and direction of the project. This Board will provide input for the strategic management of the project and will maintain vigilance over the activities of the project.
>
> *Project Partner Responsibilities* -- Specific responsibilities are outlined in the Partnership Statements. It will be the responsibility of the signatories to that agreement to ensure the obligations of that agreement are met. The Project Director and Project Advisory Board shall have the responsibility to monitor and ensure compliance with the Project Agreement document.

The Eastern Iowa Community College District (EICCD) manages more than $10 million in grants and contracts annually. The District has successfully managed major grants from the National Science Foundation (NSF), Environmental Protection Agency (EPA), U. S. Department of Education, U.S. Department of Commerce, U.S. Department of Labor, U.S. Agency for International Development (USAID), U.S. Department of State, and grants from numerous state agencies and private sources. EICCD has in place the financial management system, equipment, facilities, and associated resources to ensure the responsible and successful management of the project.

Contributions

The partners contribute one-third of the total project budget. Over one-half of the equipment costs will be provided by the Eastern Iowa Community College District. Further budget information is contained in the Detail Budget, Summary Budget, and Budget Notes.

Personnel

Project Director – Dr. Ellen Kabat Lensch has served as Principal Investigator of the NSF funded ATEEC for five years and is currently director of the national IMLS-ATEEL project. Prior to that, Dr. Kabat Lensch served more than nine years as a senior level community college administrator in a multi-college district. Dr. Kabat Lensch has successfully wrote and administered numerous grants and contracts. She has expertise in areas of program development, evaluation, environmental and vocational/technical education, telecommunications and distance learning. She serves on numerous local and state committees related to the community college and distance learning. Dr. Kabat Lensch has delivered numerous presentations at national conferences and has published numerous articles. Dr. Kabat Lensch will devote a minimum of 15 percent of her time to providing leadership and management to this project.

Instructional Designer – Ms. Diane Gere has a Masters in Arts degree in Instructional Design and Technology. She has worked as an Instructional Designer in the environmental education field for nine years. Her experience includes developing and maintaining the ATEEC website (www.ateec.org), coordinating the ATEEC Fellows Institute, develop and maintain electronic list serves, coordinating authoring teams for a number of environmental textbooks and assisting in the development of on-line curricular materials. Ms. Gere is an accomplished professional with extensive experience in instructional design for environmental education. Ms. Gere will devote 100 percent of her time to this project Year 1 and 75 percent Year 2. Her activities will complement and support the work of the librarian. Ms. Gere's current duties will be backfilled freeing up her time to serve in this position.

Instructional Technologist – Mr. Gary Olson has been a college instructor who in the last 10 years has devoted his efforts to the area of computer-assisted learning. He has recently served full-time as an Instructional Technologist in a major U.S. Department of Education grant focused upon the use of technology in the classroom. He designs instructional material for the classroom and has made numerous presentations and conducted workshops on this topic. Mr. Olson will devote 25 percent of his time to achieving the outcomes of this project.

Librarian – Ms. Meg Sarff has a M.S. degree in Library Science and more than 20 years experience in three different library settings. Ms. Sarff has special expertise in on-line library services. She has served two years as librarian for the ATEEL virtual library.

Museum Educator – Ms. Donna Murray serves as Director of Education at the Putnam Museum. She is an education professional with 20 years experience in education/museums, 10 of those years at the management level.

Evaluation

The design of the project incorporates evaluation as a central component. Evaluation, within the context of this project, has two primary foci. <u>First</u>, evaluation will serve as a critical tool for project management ensuring resources are properly allocated, providing a frame of reference to keep the project moving forward in a timely manner, providing feedback on program quality, and producing clear and measurable outcomes. The <u>second</u> component of this project evaluation design is to provide the data and analysis necessary to answer the key research questions posed by this project. Those questions are:

1. Did the *Connected By A River* project enhance student access to and use of museum resources?
2. Does the project demonstrate that participation in these museum-based learning modules resulted in student learning as measured against the school district's adopted Benchmarks and Standards?
3. Do participating classroom teachers support the expansion and further development of the role of museums and libraries in the core educational process?

The evaluation design takes into account formative and summative data, process and product objectives, and includes both internal and external components. *The Schedule of Completion/ Project Implementation and Evaluation Table* organizes and captures the essential evaluation data required for both components of the evaluation -- the project management current data and the key research questions. This document schedules each activity into a timeline, identifies the primary person responsible, and sets forth the evaluation metric for each activity.

Within each grant year, the evaluation process will place emphasis on formative evaluation. For the formative evaluation the analysis will be descriptive and inferential in nature. This formative evaluation will allow for adjustments of objectives and schedules, reallocation of resources, revision of strategies to attain the desired outcome, and dealing with unanticipated obstacles or problems. The formative aspect of the evaluation process will allow for the early and immediate identification and addressing of areas needing improvement.

Comprehensive summative evaluations will occur at the end of each project year. The analysis strategy will be based on a discrepancy model and will measure the variance between established measures and the actual achievement of those measures. Each year the Project Manager will prepare a summative evaluation based upon the activities and evaluation measures outlined in the Project Implementation and Evaluation Table.

Dissemination

The structure of the project lends itself to efficient and rapid dissemination. All project elements will exist in electronic format on the web or CD-ROMs. The project as a whole, as well as individual project components, will have a high degree of replicability. The key elements and products of the project will be captured to be disseminated and made available for replication in the local community as well as nationally.

The specific project deliverables are listed in the "Adaptability" Section. These project results, products, and processes will be disseminated through a variety of channels. All project partners will assume responsibility for dissemination. These efforts will include:

- Creation of a *Connected By A River* project website within the national Advanced Technology Environmental Education Library (ATEEL) virtual library.

- Advanced Technology Environmental Center (ATEEC) will publish articles about this project in the <u>ATEEC News</u>. This quarterly publication has a circulation of more than 6,000 educators, businesses, and government agencies. The current ATEEC

website will contain information on the project and will provide a link to the project site.

- Conference presentations at the Association of American Museums, Association of Science and Technology, state and regional education and library conferences.

- Submission of articles to professional publications serving museum professionals, librarians, educators, and environmental organizations.

Sustainability

Project benefits will continue long beyond the period of the grant. The majority of the project costs represent start-up or proof-of-concept expenditures. The project seeks to demonstrate an innovative collaborative community effort, utilizing advanced information technology, to create a new form of museum-based learning modules that are an integral part of the core learning of students. The major project costs are one-time expenditures to create the partnership, establish the educational and technical protocols for the modules, provide inservice, evaluate the model, and disseminate project information. The costs to replicate additional learning modules after the model has been established and tested are significantly reduced. The project will demonstrate that continued outside funding is not necessary to maintain the model - it simply becomes a new way of carrying out the already funded educational services of museums and libraries.

The broad national dissemination of the project will also sustain project benefits beyond the period of the grant. The ATEEL on-line library of Scott Community College will continue to serve as host for the museum-based learning modules and will maintain all project documentation. This documentation of project findings will be actively marketed to museum professionals, librarians, and educators in order to encourage replication of this innovative approach to building the community presence of museums and libraries.

REFERENCES CITED

1.   Richard Rabinowitz, "Learning in Public Places: The Museum," Presented at a meeting of the American Educational Research Association, New Orleans, Louisiana, February 26, 1973.

2.   "Museums, Imagination and Education," Unipub, Inc., New York, New York, 1973.

3.   Ellen Cochran Hicks, "Museums and Schools as Partners," Syracuse University, Syracuse, New York, 1986.

4.   "True Needs True Partners: 1998 Survey Highlights, Museums Serving Schools," Institute of Museum and Library Services, Washington, D.C.

5.   Davis, Stan and Christopher Meyer, 1998, "Blur: The Speed of Change in a Connected Economy." Reading Massachusetts: Addison-Wesley.

SCHEDULE OF COMPLETION/PROJECT IMPLEMENTATION AND EVALUATION TABLE

GOAL: To demonstrate an innovative collaborative effort that utilizes emerging information technologies to create learning spaces that are an integral part of the core learning of students.

Objective 1: Develop innovative learning modules based on local standards and benchmarks.

ACTIVITY	MONTHS	PERSON RESPONSIBLE	EVALUATION MEASURES	
			FORMATIVE/PROCESS	SUMMATIVE IMPACT MEASURES
1. Establish Project Advisory Board and hold semi-annual meetings	3, 9, 15, 21	Project Director	Board Meeting minutes will be recorded twice a year	Participation on Advisory Panel includes; museum professionals, librarians, educators, instructional designers, IT experts, and environmental content specialist
2. Curriculum development team reviews Standards and Benchmarks and museum resources to determine specific focus of five learning modules	2-8	Instructional Designer	Museum learning resources are matched to school districts' Standards and Benchmarks	Completing each learning module demonstrates mastery of at least one Standard or Benchmark
3. Package "turnkey" learning modules are developed and formatted for web-based or CD-ROM delivery	9-21	Instructional Designer	Learning modules include on-line: • Pre- and post-sample tests • Teachers manual • Student manual which includes learning content and simulations • Enhancement resources available through library • Enhancement activities for use at the museum	Each of five learning modules are accessed on-line by a minimum of 35 students

Objective 1: Continued

ACTIVITY	MONTHS	PERSON RESPONSIBLE	EVALUATION MEASURES	
			FORMATIVE/PROCESS	SUMMATIVE IMPACT MEASURES
4. Project "learning space" is designed for access from all participating libraries and is activated	9	Instructional Designer Instructional Technologist	Website for learning modules is designed with a printed copy in the project file	100% of target classrooms and libraries can access the site
5. In-service for librarians and teachers on how to access and use the learning modules	12-16	Project Director Instructional Technologist	Outline for in-service activity is developed and placed on file	Minimum of 10 participants during initial pilot stage

Objective 2: Evaluate project outcomes and research results.

ACTIVITY	MONTHS	PERSON RESPONSIBLE	EVALUATION MEASURES	
			FORMATIVE/PROCESS	SUMMATIVE IMPACT MEASURES
1. Collect and analyze data from test-bed sites	16-24	Project Director Instructional Designer	Data collection process is documented and placed on file	Testbed sites report at least 70% level of satisfaction and 100% of sites are solicited for data on how to improve the modules
2. Establish an on-line teacher/student feedback system	12	Instructional Technologist	Feedback system is developed and documentation is placed on file	Minimum of 20% of students and teachers utilize feedback system
3. Collect, analyze, and report on information related to Research Design	20-23	Project Director Instructional Designer	Data collection process is documented and placed on file	Final report presents all evidence that either supports or refutes an affirmative answer to the research question

Objective 3: Disseminate and build upon project activities and outcomes to promote and sustain the project.

ACTIVITY	MONTHS	PERSON RESPONSIBLE	EVALUATION MEASURES	
			FORMATIVE/PROCESS	SUMMATIVE IMPACT MEASURES
1. Fully summarize and document the design, implementation, and evaluation of the project for use by others in adopting the model to other communities	23	Project Director Project Implementation Team	Full project documentation is available in print and electronic form	50 requests for project documentation are received
2. Disseminate project information through conferences, articles, website, and through project partners	23-24	Project Director Project Advisory Board Members	Minimum of 3 articles, 3 conference presentations and 1,000 website hits are documented	Project information reaches an audience of 7,500

Project Budget Form

SECTION 1: DETAILED BUDGET

Year 1 - Budget Period from ___10/ 01 / 01___ to ___09/ 30/ 02___

Name of Applicant: ___Eastern Iowa Community College District___

SALARIES AND WAGES (PERMANENT STAFF)

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	Applicant	TOTAL
Dr. Ellen Kabat Lensch, Project Manager	(1)	5% IMLS, 10% Match	–	–	
Diane Gere Instructional Designer	(2)	100% IMLS	–	–	
Gary Olson, I.T. Specialist/Web Master	(3)	25% IMLS	–	–	
Admin. Assistant	(4)	15% IMLS, 10% Match			
TOTAL SALARIES AND WAGES			$		

SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	Applicant	TOTAL
	(1)				
TOTAL SALARIES AND WAGES			$	$	$

FRINGE BENEFITS

RATE	Of $	SALARY BASE	IMLS	Applicant	TOTAL
TOTAL FRINGE BENEFITS			$		

CONSULTANT FEES

NAME/TYPE OF CONSULTANT	RATE OF COMPENSATION (Daily or Hourly)	No. of Days (or Hrs.) on Project	IMLS	Applicant	TOTAL
Patrick Meighan, Configuration of Hardware & Software	$100/Hr.	30 Hrs.	3,000	-0-	3,000
TOTAL CONSULTANT FEES			$ 3,000	$ -0-	$ 3,000

TRAVEL

FROM/TO	NUMBER OF: PERSONS	DAYS	SUBSISTENCE COSTS	TRANSPORTATION COSTS	IMLS	Applicant	TOTAL
To IMLS Meeting	(4)	(3)	$300/Mtg.	$700/Mtg.	4,000	-0-	4,000
To 3 Conferences For Dissemination	(3)	(3)	$300/Person	$700/Person	3,000	-0-	3,000
	( )	( )					
TOTAL TRAVEL COSTS					$ 7,000	$ -0-	$ 7,000

Project Budget Form Back
SECTION 1: DETAILED BUDGET CONTINUED

MATERIALS, SUPPLIES, AND EQUIPMENT

ITEM	BASIS/METHOD OF COST COMPUTATION	IMLS	APPLICANT	TOTAL
Video Streaming Editor\Digitizer	Vender Quote	-0-	4,007	4,007
2 Computers for Video Conferencing & Access to Learning Materials at Nahant Marsh	$2,000 per Computer	4,000	-0-	4,000
Nahant Marsh Educational CD-ROMs	2 each for 10 classrooms, 2 for Putnam Museum, 2 for Nahant Marsh Center, 24 CD-ROM @ $50 ea.	-0-	1,200	1,200
Computer Cameras	One for each Testbed, One for Nahant Marsh @ $100 ea.	1,100	-0-	1,100
TOTAL COST OF MATERIAL, SUPPLIES, & EQUIPMENT		$ 5,100	$ 5,207	$ 10,307

SERVICES

ITEM	BASIS/METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S)	TOTAL
Honorarium for Testbed Site Instructor	$300/Site x 10 Sites	3,000	-0-	-0-	3,000
Contract with Davenport Library for Librarian Services.		8,750	-0-	-0-	8,750
Contract with Putnam Museum for Museum Educator Services		8,750	-0-	-0-	8,750
Phone Line for 2 Computers @ Nahant Marsh Educational Site	@ $20/Line x 2/Month	480	-0-	-0-	480
School District Services	@ 250/Day x 10 Days x 4 Dist.	-0-	-0-	10,000	10,000
Area Educational Agency Services	$300/Day x 10 Days	-0-	-0-	3,000	3,000
TOTAL SERVICES		$ 20,980	$ -0-	$ 13,000	$ 33,980

OTHER

ITEM	BASIS/METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S)	TOTAL
TOTAL COSTS OF OTHER		$ -0-	$ -0-	$ -0-	$ -0-

TOTAL DIRECT PROJECT COSTS:	$ 119,475	$ 17,622	$ 13,000	$ 150,097

Project Budget Form Back
SECTION 1: DETAILED BUDGET CONTINUED

INDIRECT COSTS

Select either item A or B and complete C. (See section on Indirect Costs, Page 2.4)

Applicant is using
- A. an indirect cost rate which does not exceed 20% of modified total direct costs - may be listed only as cost sharing,
- B. an indirect cost rate negotiated with a Federal agency (copy attached) - may be requested from IMLS; based only on modified direct costs (as specified in the negotiated agreement) that are charged to IMLS; additional indirect costs based on the applicant's or partner's contributions may be listed only as cost sharing.

U.S. Dept. of Health & Human Services   07/01/96 TO 07/01/03
Name of Federal Agency   Effective Date of Agreement

C. Rate base(s)   Amount(s)
   43   % of $ 95,810   = $ 41,198

	IMLS	APPLICANT	PARTNER(S) IF APPLICABLE	TOTAL
TOTAL INDIRECT COSTS CHARGED TO:	$ 9,581 (10%)	$ 31,617 (33%)	$ -0-	$ 41,198

Project Budget Form

SECTION 1: DETAILED BUDGET

Year 2 - Budget Period from ___10/ 01 / 02___ **to** ___09/ 30 / 03___

Name of Applicant: ___Eastern Iowa Community College District___

SALARIES AND WAGES (PERMANENT STAFF)

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	APPLICANT	TOTAL
Dr. Ellen Kabat Lensch, Project Manager	(1)	- 5% IMLS, 10% Match			
Diane Gere Instructional Designer	(2)	- 75% IMLS			
Gary Olson , I.T. Specialist/Web Master	(3)	15% IMLS			
Admin. Assistant	(4)	25% IMLS, 10% Match			

TOTAL SALARIES AND WAGES

SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	APPLICANT	TOTAL
	(1)				

TOTAL SALARIES AND WAGES	$	$	$

FRINGE BENEFITS

RATE		SALARY BASE	IMLS	APPLICANT	TOTAL
	Of $				

TOTAL FRINGE BENEFITS	$

CONSULTANT FEES

NAME/TYPE OF CONSULTANT	RATE OF COMPENSATION (Daily or Hourly)	No. of Days (or Hrs.) on Project	IMLS	APPLICANT	TOTAL

TOTAL CONSULTANT FEES	$ -0-	$ -0-	$ -0-

TRAVEL

FROM/TO	NUMBER OF: PERSONS	DAYS	SUBSISTENCE COSTS	TRANSPORTATION COSTS	IMLS	APPLICANT	TOTAL
To IMLS Meeting	(4)	(3)	$300/Mtg.	$700/Mtg.	4,000	-0-	4,000
To 3 Conferences For Dissemination	(3)	(3)	$300/Person	$700/Person	3,000	-0-	3,000
	( )	( )					

TOTAL TRAVEL COSTS	$ 7,000	$ -0-	$ 7,000

MATERIALS, SUPPLIES, AND EQUIPMENT

ITEM	BASIS/METHOD OF COST COMPUTATION	IMLS	APPLICANT	TOTAL
TOTAL COST OF MATERIAL, SUPPLIES, & EQUIPMENT		$	$	$ -0-

SERVICES

ITEM	BASIS/METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S)	TOTAL
Honorarium for Testbed Site Instructor	$300/Site x 10 Sites	3,000	-0-	-0-	3,000
Contract with Davenport Library for Librarian Services.		8,750	-0-	-0-	8,750
Contract with Putnam Museum for Museum Educator Services		8,750	-0-	-0-	8,750
Phone Line for 2 Computers @ Nahant Marsh Educational Site	@ $20/Line x 2/Month	480	-0-	-0-	480
School District Services	@ 250/Day x 10 Days x 4 Dist.	-0-	-0-	10,000	10,000
Area Educational Agency Services	$300/Day x 10 Days	-0-	-0-	3,000	3,000
TOTAL SERVICES		$ 20,980	$ -0-	$ 13,000	$ 33,980

OTHER

ITEM	BASIS/METHOD OF COST COMPUTATION	IMLS	APPLICANT	PARTNER(S)	TOTAL
TOTAL COSTS OF OTHER		$ -0-	$ -0-	$ -0-	$ -0-

	IMLS	APPLICANT	PARTNER(S)	TOTAL
TOTAL DIRECT PROJECT COSTS:	$ 93,123	$ 12,788	$ 13,000	$ 118,911

INDIRECT COSTS

Select either item A or B and complete C. (See section on Indirect Costs, Page 2.4)

Applicant is using
- A. an indirect cost rate which does not exceed 20% of modified total direct costs - may be listed only as cost sharing,
- B. an indirect cost rate negotiated with a Federal agency (copy attached) - may be requested from IMLS; based only on modified direct costs (as specified in the negotiated agreement) that are charged to IMLS; additional indirect costs based on the applicant's or partner's contributions may be listed only as cost sharing.

U.S. Dept. of Health & Human Services   07/01/96 TO 07/ 01/ 03
Name of Federal Agency   Effective Date of Agreement

C. Rate base(s)   Amount(s)
   43 %   of $ 77,931   = $ 33,510

	IMLS	APPLICANT	PARTNER(S) IF APPLICABLE	TOTAL
TOTAL INDIRECT COSTS CHARGED TO:	$ 7,793 (10%)	$ 25,717 (33%)	$ -0-	$ 33,510

ProjectBudgetForm

SECTION2:SUMMARYBUDGET

NameofApplicantOrganization _____Eastern Iowa Community College District_____

IMPORTANT!READ INSTRUCTIONS ON PAGES 2.3–2.4 BEFORE PROCEEDING.

DIRECT COSTS	IMLS	Applicant	Partner(s) (ifapplicable)	Total
SALARIES & WAGES				—
FRINGE BENEFITS				
CONSULTANT FEES		-0-	-0-	3,000
TRAVEL		-0-	-0-	14,000
MATERIALS, SUPPLIES & EQUIPMENT			-0-	10,307
SERVICES		-0-	26,000	67,960
OTHER	-0-	-0-	-0-	-0-
TOTAL DIRECT COSTS	$ 212,598	$ 30,410	$ 26,000	$ 269,008
INDIRECT COSTS*	$ 17,374	$ 57,334	$ -0-	$ 74,708

*Ifyoudonothaveacurrent Federally negotiated rate, your indirect costs must appear in the Applicant or Partner columns only. Ifyouhaveacurrent Federally negotiated rate. **TOTAL PROJECT COSTS** $ ___343,716___ requestindirectcostsfromIMLSonlyonthedirectprojectcosts requestedfromIMLS.

AMOUNT OF CASH-MATCH $ __-0-__ $ __-0-__

AMOUNT OF IN-KIND CONTRIBUTIONS $ __87,744__ $ __26,000__
(INSTITUTIONAL COST-SHARING), INCLUDING INDIRECT COSTS

TOTAL AMOUNT OF MATCH (CASH & IN-KIND CONTRIBUTIONS) $ ___113,744___

AMOUNT REQUESTED FROM IMLS, INCLUDING INDIRECT COSTS $ ___229,972___

PERCENTAGE OF TOTAL PROJECT COSTS REQUESTED FROM IMLS   __66__ %
(MAY NOT EXCEED 50% IF REQUEST EXCEEDS $250,000 – RESEARCH PROJECTS EXCEPTED, SEE COST SHARING ON PAGE 1.7)

HaveyoureceivedorrequestedfundsforanyoftheseprojectactivitiesfromanotherFederalagency?
(Pleasecheckone)   ☐ Yes   ☑ No

Ifyes,nameofagency _____

Dateofapplication _____ oraward _____ Amountrequestedorreceived $ _____

Project Budget Form

SECTION 1: DETAILED BUDGET

Year 2 - Budget Period from ___10/ 01 / 02___ to ___09/ 30 / 03___

Name of Applicant: ___Eastern Iowa Community College District___

SALARIES AND WAGES (PERMANENT STAFF)

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	APPLICANT	TOTAL
Dr. Ellen Kabat Lensch, Project Manager	(1)	- 5% IMLS, 10% Match			
Diane Gere Instructional Designer	(2)	- 75% IMLS			
Gary Olson , I.T. Specialist/Web Master	(3)	15% IMLS			
Admin. Assistant	(4)	25% IMLS, 10% Match			

TOTAL SALARIES AND WAGES

SALARIES AND WAGES (TEMPORARY STAFF HIRED FOR PROJECT)

NAME/TITLE	No.	METHOD OF COST COMPUTATION	IMLS	APPLICANT	TOTAL
	(1)				

TOTAL SALARIES AND WAGES $ _____ $ _____ $ _____

FRINGE BENEFITS

RATE		SALARY BASE	IMLS	APPLICANT	TOTAL
_____	Of $ _____				

TOTAL FRINGE BENEFITS $ _____

CONSULTANT FEES

NAME/TYPE OF CONSULTANT	RATE OF COMPENSATION (Daily or Hourly)	No. of Days (or Hrs.) on Project	IMLS	APPLICANT	TOTAL

TOTAL CONSULTANT FEES $ -0- $ -0- $ -0-

TRAVEL

FROM/TO	NUMBER OF: PERSONS	DAYS	SUBSISTENCE COSTS	TRANSPORTATION COSTS	IMLS	APPLICANT	TOTAL
To IMLS Meeting	(4)	(3)	$300/Mtg.	$700/Mtg.	4,000	-0-	4,000
To 3 Conferences For Dissemination	(3)	(3)	$300/Person	$700/Person	3,000	-0-	3,000
	( )	( )					

TOTAL TRAVEL COSTS $ 7,000 $ -0- $ 7,000

BUDGET NOTES

<u>Salaries and Wages</u>

Four EICCD staff will work on this project. The contributions of project partner staff are detailed in the Services Section. EICCD believes this staffing pattern is efficient, yet adequate to accomplish the goals and objectives of the project. Total project staffing represents a collaboration of librarians, museum professionals, educators, technical experts, and instructional designers.

All salaries are consistent with the established salary schedules of EICCD and those of the partner institutions. A three percent salary increase has been computed for year two of the project. The staffing pattern includes significant cost sharing.

The following is a brief description of the role of each position listed in this section:

Project Director
- Overall management of project
- Chair Project Advisory Board and Project Implementation Team
- File all necessary program and fiscal reports
- Serve as liaison to IMLS

Instructional Designer
- Overall responsibility for learning modules
- Works in close partnership with classroom instructors, librarians, and museum personnel

Instructional Technologist
- Design hardware and software configuration for learning modules
- Assist in all technical aspects of design including video conferencing, simulations, and video streaming

Administrative Assistance
- Maintains project records
- Ensures timely filing of all required reports
- Maintains all budget records
- Provides information and responds to routine inquiries

<u>Fringe</u>

EICCD has a comprehensive program of employee benefits including social security, workman's compensation, retirement plan, health and dental insurance, and life insurance. Currently, the cost of these benefits is percent of salary. These costs have been matched by EICCD for those staff salaries paid by the District.

Consultant Fees

To be successful in serving as a national demonstration model this project must employ state-of-the-market, advanced information technologies. In order to assure the most efficient and advanced configuration of hardware and software the services of a nationally recognized technology consulting firm have been employed. Mr. Patrick Meighan is a Senior Network Consultant for the Integrated Technology Solutions Group of McGladry and Pullen. He has worked in information services since 1981. Mr. Meighan has managed a number of major projects including extensive consulting work with the Advanced Technology Environmental Education Library (ATEEL). The hourly rate charged to the project for Mr. Meighan's services represents the standard educational rate.

Travel

All travel is directly related to specific objectives of the grant. Travel is limited to providing three project presentations per year at regional or national conferences and the required allocation of travel dollars to attend the IMLS designated meetings.

Materials, Supplies, and Equipment

This project requires a variety of hardware and software purchases. The Video Streaming Editor/Digitizer will allow for an enriched learning environment for the students. It is necessary to have two computers and an Internet connection at the Nahant Marsh Educational Center. These computers will serve a dual purpose in the project. They will allow the naturalist to interact via chat rooms, bulletin board, and video-conferencing with students in the classroom, and they will allow students who visit the Center to access via a CD-ROM or via the website the
learning modules built around the experiences provided at the Nahant Marsh. All computers will be equipped with digital cameras for live video-conferencing. Each of these items is critical to the success of the project. More than half of the cost of items in this category is being contributed by EICCD.

Services

This collaborative project requires the services of a variety of people not employed by EICCD. These include: librarian services from the Davenport Public Library to assist in locating and organizing materials to enhance the learning modules; museum educator services to provide access to and specialized expertise in the relevant museum collections and resources of the Nahant Marsh Educational Center; classroom instructors to assist in developing the learning modules and to serve as "testbed" sites in the development of the modules; and staff of the Area Education Agency to work closely with the project to ensure the learning outcomes of the five modules align with the Standards and Benchmarks required of each school district.

Indirect Costs

EICCD has a Federally approved indirect cost rate of 43 percent of salary and fringe. The grant is being charged 10 percent of salary and fringe, the remaining 33 percent is provided as a match to the project. (See attached Federal Indirect Cost Rate documentation.)

COLLABORATORS

MUSEUM/ NAHANT MARSH	SCHOOLS	LIBRARIES (ATEEL, SCHOOLS AND CITY LIBRARIES)
Role: • Provide representation on Project Advisory Board • Provide content (displays and artifacts) for learning modules • Assist in development of learning modules • Assist in dissemination efforts	**Role:** • Provide representation on Project Advisory Board • Provide test bed sites to pilot learning materials • Evaluate learning materials • Assist in dissemination efforts	**Role:** • Provide web platform for learning modules • Locate and organize materials to enhance and extend student learning
Benefits: • Increased utilization of museum resources for education • Increased interest in and patronage of museum • Further solidifies museum's value to and partnership with the local community	**Benefits:** • Increases resources for contextual-based learning • Innovative learning approaches designed around Standards and Benchmarks • Increased student involvement with advanced information technology	**Benefits:** • Increase patronage and use of library resources • Promotes close cooperation and mutual support between classroom teachers and libraries • Enhances the role of the library in issues of pressing local concern

ATEEC	AEA	RIVER ACTION, INC.
Role: • Provide environmental content expertise • Develop learning materials • Develop digital site for learning modules including necessary simulations • Provide access to learning materials through both web-based servers and CD-ROMS	**Role:** • Serve on Project Advisory Panel • Assist in matching learning exercises to Standards and Benchmarks • Evaluate learning materials • Assist in dissemination	**Role:** • Serve on Project Advisory Board • Provide access to and information about public displays at the Nahant Marsh to assist in creating the learning modules • Assist in securing content experts to serve in reviewing learning modules
Benefits: • Promotes awareness of environmental issues among K-12 students • Contributes to knowledge of environmental careers • Expands learning materials available through ATEEC	**Benefits:** • Vehicle to provide assistance to K-12 schools in meeting mandated Benchmarks and Standards • Promotes contextual inquiry-based education • Meets goal of enhancing student involvement with advanced information technologies	**Benefits:** • Increased understanding of and interest in the organization's activities • Creation of a pool of potential "environmental" volunteers • Promotes community awareness of environmental issues

ORGANIZATIONAL PROFILE

The Advanced Technology Environmental Education Library of
The Eastern Iowa Community College District

The Advanced Technology Environmental Education Library (ATEEL) is an electronic library serving as a clearing house of juried web resources for students, instructors, and technicians in the environmental technology field. ATEEL results from an Institute of Museum and Library Services (IMLS) grant.

ATEEL represents a national collaborative effort by a number of organizations. A national team of librarians, environmental educators, information providers, and technology experts created ATEEL. A National Project Advisory Board advises on the direction of the library, provides input for the strategic management of the library, and maintains vigilance over the activities of the library. A Project Implementation Team, composed of staff of the Eastern Iowa Community College District, provides project leadership, and ensures all objectives and activities of the library are carried out.

ATEEL's Partners Include:

- Advanced Technology Environmental Education Center (ATEEC)
- Davenport Public Library
- Eastern Iowa Community College District (EICCD)
- Hazardous Materials Training and Research Institute (HMTRI)
- Institute of Museum and Library Services (IMLS)
- Partnership for Environmental Technology Education (PETE)
- Pollution Prevention Regional Information Center
- University of Northern Iowa

ATEEL is a division of the Scott Community College library, which is one of the three colleges of the Eastern Iowa Community College District.

ORGANIZATIONAL PROFILE

Putnam Museum of History and Natural Science

The Putnam Museum provides a one-stop opportunity to discover the culture, enjoy the history, and explore the natural world of the Mississippi River Valley and other places. The Museum has four major exhibit halls dealing with the Mississippi River. The exhibits are:

Black Earth/Big River – Patrons immerse themselves in the natural habitats of the region as they walk through woodland, cave, and prairie.

River, Prairie, and People – Local history is explored from the early days of Native American settlement to the era of the Baby Boomer generation.

Hall of Mammals – Exhibits life-sized models of animals in their natural habitats.

River Valley Discovery Room – This hands-on room is full of artifacts to be explored. It presents the world of nature and interesting items and ways of living from the past.

The Nahant Marsh is a recently reinvigorated wetland area that is owned by the City of Davenport. The Putnam Museum has created and will staff an on-site Nahant Marsh Educational Center. The resources of the Putnam Museum will form the basis for the design of the five learning modules.